

INTERVIEW SUMMARY

Applicants wish to thank Examiner Rude and Supervisory Examiner Chowdhury for the helpful and courteous discussion with Applicants' Representative on August 11, 2004. During this discussion it was noted that it is improper to combine Hattori et al, Morokawa et al and West et al because Hattori et al relates to an OCB type LCD which is completely different from the claimed liquid crystal display element having a chiral nematic liquid crystal layer. Modifying the OCB type LCD of Hattori et al as suggested by the Examiner cannot result in the claimed display.

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in **Claim 1** relates to a liquid crystal display element, comprising, inter alia a chiral nematic liquid crystal layer comprising

a nematic liquid crystal, and

an amount of chiral dopant sufficient to provide reflection of visible light, and

wherein the liquid crystal layer exhibits a plurality of display states, wherein one of said display states is a planar state and another display state is a focal conic state.

The display of Hattori et al is completely different from the claimed display. Applicants wish to draw the Examiner's attention to the attached sheet illustrating the differences between the OCB device of Hattori et al and the claimed chiral nematic LCD. Hattori et al disclose a LCD which operates in the OCB mode (Optical compensated bend mode). Here a **bend alignment state** (ON time) is changed to a **splay alignment state** (OFF time) and vice versa by utilizing the orientation at the surfaces. See the attached sheet. There is no planar or focal conic state as claimed. In contrast, in the present invention a planar or a focal conic state are maintained stably by changing the alignment of helices built by the chiral nematic liquid crystal. See the attached sheet and page 23 of the specification. However, such helical structure and the corresponding planar and focal conic states do not occur in the OCB type LCD of Hattori et al. Adding chiral dopants such as those disclosed by West et al to the nematic liquid crystal of Hattori et al may improve the performance of Hattori et al's display, but cannot result in a planar or focal conic display state as claimed. In fact, Hattori et al disclose that a chiral agent is added to facilitate reliable transition from a splay alignment state to the bend alignment state (Hattori et al, abstract). There is simply no planar or focal conic state.

Further, even if the pixel dimensions and gaps between adjacent pixels as described in Morokawa et al (Morokawa et al, col. 2, lines 24-28) are used in Hattori et al, it would not change the fact that there is no planar or focal conic state in Hattori et al's display.

Therefore, the rejection of Claims 1-3, 5, 6, 8, 10, 22 and 23 under 35 U.S.C. § 103(a) over Hattori et al in view of Morokawa et al and further in view of West et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The Examiner has asserted that Applicants previously only provided two arguments. Applicants disagree. The Examiner is respectfully invited to reread Applicants responses filed November 26, 2003, January 12, 2004 and January 23, 2004.

In addition, Applicants note that they have by no means acquiesced to the Examiner's rationale regarding the dependent claims as asserted in the Office Action at page 11, 1st full paragraph. Applicants wish to draw the Examiner's attention to the fact that the dependent claims are deemed to be allowable by Applicants because the independent Claims are deemed allowable. Accordingly, no further argument is necessary.

The objection to Claim 2 is obviated by the amendment of this claim.

Withdrawn claims that depend from an allowable claim or include all limitations of an allowable claim should be rejoined.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Kirsten A. Grueneberg, Ph.D.
Registration No.: 47,297

Tel: (703) 413-3000
Fax: (703) 413 -2220
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H:\205040US-AM.FINAL.DOC